LIST OF CONTENTS

Number 1

H. Y. Ueng and **H. L. Hwang**	1	The defect structure of $CuInS_2$. Part II: thermal annealing defects
H. Y. Ueng and **H. L. Hwang**	11	The defect structure of $CuInS_2$. Part III: extrinsic impurities
A. Lodder	19	Momentum-balance considerations in electromigration revisited
G. Petot-Ervas, C. Petot, F. Gesmundo and **C. Clauss**	27	The influence of aluminium on the transport properties of cobaltous oxide
S. B. Sharma, P. Paliwal and **M. Kumar**	35	Electronic dielectric constant, energy gap and fractional ionic character of polyatomic binary compounds
Jenn-Gwo Hwu and **Shyh-Liang Fu**	41	Resistance-dependent field effect on the radiation behavior of MOS capacitors examined by instantaneous-terminal-voltage technique
P. Franke and **R. Dieckmann**	49	Thermodynamics of iron manganese mixed oxides at high temperatures
Michal Malinowski	59	Optical transitions of Pr^{3+}–Er^{3+} ion pairs in KYP_4O_{12}
Juh-Tzeng Lue, Cho-Chin Wu, R. S. Liu, J. M. Liang and **P. T. Wu**	65	Local-magnetic-moment variation in pure and impure phases of Tl–Ca–Ba–Cu–O superconductors
Devendra Kumar, Ch. Durga Prasad and **Om Parkash**	73	Electrical conductivity behaviour of the solid solution $Ba_{1-x}La_xTi_{1-x}Co_xO_3$
R. Benloucif, N. Nguyen, J. M. Greneche and **B. Raveau**	79	Oxygen-deficient brownmillerites: cation coordination and magnetic properties
M. Schlesinger and **T. Szczurek**	85	Infrared excited Er^{3+} ions in CaF_2 crystals
		Technical Note
S. Shigetomi, H. Ohkubo and **T. Ikari**	91	Photoluminescence of Cd-doped *p*-InSe

Number 2

Sylvester N. Ekpenuma and **Charles W. Myles**	93	Semi-empirical tightbinding bandstructures for II–VI zincblende compounds
Yu. V. Shaldin and **R. Poprawski**	101	The spontaneous birefringence and pyroelectric effect in $KTiOPO_4$ crystals
H. H. S. Javadi, S. P. Treat, J. M. Ginder, J. F. Wolf and **A. J. Epstein**	107	Aniline tetramers: comparison with aniline octamer and polyaniline
Seung Koo Cho, Don Kim, Jae Shi Choi and **Keu Hong Kim**	113	Characterization of $YBa_2Cu_3O_{7-x}F_y$ superconducting materials by Raman spectroscopy

Renate Wolff, Reiner Radeglia and Christine Vogel	123	Theoretical interpretation of ^{29}Si NMR chemical shifts of aluminosilicates—III. Semiempirical determination of the paramagnetic shielding constant
F. B. Mallory, C. W. Mallory, K. G. Conn and P. A. Beckmann	129	Methyl reorientation in methylphenanthrenes—II. Solid state proton spin-lattice relaxation in the 1-CH_3, 9-CH_3 and 1-CD_3, 9-CH_3 systems
R. Aroca, Z. Q. Zeng and J. Mink	135	Vibrational assignment of totally symmetric modes in phthalocyanine molecules
V. P. Gupta and S. K. Sipani	141	A study of thermal and elastic properties of ionic crystals within the framework of compressible ion theory
C. L. Roy and Chandan Basu	147	A study of the relativistic electronic state of disordered systems
A. Ferrigato and K. J. Maxwell	157	Exchange studies in a trigonal Cr^{3+} dimer system: the $(^4A_2 \times {}^2T_1)$ states in $Rb_3Cr_2Br_9$
Juan M. Aceves Hernández, Adolfo Padilla I., Laura Cabrera and José M. Tejero	165	Current–voltage curves from Bi_2O_3–(BaO), an oxygen ionic conductor, at different temperatures
S. Denagbe, M. Martinaud, M. Schvoerer, F. Marsaud, J. C. Launay and P. Hagenmuller	171	Thermally stimulated luminescence in undoped and doped $Bi_{12}GeO_{20}$ single crystals
Jose Fayos	177	The role of NH_4 rotor orientation in the crystallographic transition of perovskites NH_4MnX_3 for X = F or Cl
N. Benbattouche, G. A. Saunders and H. Bach	181	The pressure and temperature dependences of the elastic properties of EuS
W. M. A. Smit, G. J. Dirksen and D. J. Stufkens	189	Infrared and Raman spectra of the elpasolites $Cs_2NaSbCl_6$ and $Cs_2NaBiCl_6$: evidence for a pseudo Jahn–Teller distorted ground state

Number 3

D. R. Taylor, J. T. Graham, J. D. MacArthur, R. D. Heyding, B. A. Judd, J. H. Page, G. H. Pelletier and B. E. Watts	197	Homogeneity and composition of mixed flux-grown $Dy(As_xV_{1-x})O_4$ crystals
S. S. Hafner, J. Stanek and M. Stanek	203	^{57}Fe hyperfine interactions in the magnetic phase of fayalite, Fe_2SiO_4
G. Babos and D. Chassapis	209	The calculation of the effective values of physical properties for random composites with circular inclusions
Michael J. Radler, Jerome B. Cohen and John Faber, Jr	217	Point defect clusters in wüstite
W. Ryba-Romanowski	229	Investigation of radiative and non-radiative transitions of Er^{3+} in $BaLaGa_3O_7$
C. P. Köhler, R. Jakobi, E. Meissner, L. Wiehl, H. Spiering and P. Gütlich	239	Nature of the phase transition in spin crossover compounds
J. Szatkowski and K. Sierański	249	Electrical conductivity of Zn_3As_2

M. M. Ibrahim, N. Afify, M. M. Hafiz and M. A. Mahmoud — 253 Thermoelectric power of bulk specimens of the system $Bi_{1-x}Te_x$

J. Bethin, D. O. Welch and M. A. Pick — 259 Phase equilibria in the niobium–vanadium–hydrogen system

Guo Xiang Lan, Qing Rui Cai, Hua Fu Wang and Guang Yan Hong — 273 High-pressure Raman spectra of LnP_5O_{14} crystals

Qing Rui Cai, Guo Xiang Lan, Hua Fu Wang and Guang Yan Hong — 279 The effect of pressure on the ferroelastic phase transition in LnP_5O_{14}

François Morin and Rüdiger Dieckmann — 283 True chemical diffusivity and surface reactivity of cobaltous oxide

Number 4

A. M. Elkorashy — 289 Optical constants of tin selenide single crystals by interference method

K. Ganesan, R. Damle and J. Ramakrishna — 297 NMR study of molecular dynamics in hydrazinium phosphates

A. Halperin — 303 Single irradiation excitation of the thermoluminescence (TSL) related to the $[SiO_4/Li]^0$ center in quartz

D. L. Cowan, V. Priest, T. R. Marrero and D. W. Slaughter — 307 Electrical conductivity in polyaniline

E. Iguchi and Y. Yonezawa — 313 Overlapping repulsive energies between ions (Y^{3+}, Ba^{2+}, Cu^{3+}, Cu^{2+} and O^{2-}) and their effects on the nature of the bonds in Y_2O_3, BaO, CuO and $YBa_2Cu_3O_x$

J. Lakshmana Rao, R. Murali Krishna, S. V. J. Lakshman and Prem Chand — 323 EPR of Cu^{2+} ions in synthetic $NaNH_4SO_4 . 2H_2O$ single crystals

R. S. Bansal, V. P. Seth and Prem Chand — 329 A single crystal electron paramagnetic resonance study of manganese(II) doped cadmium maleate dihydrate

M. Kettaf, A. Conan, A. Bonnet and J. C. Bernede — 333 Electrical properties of molybdenum ditelluride thin films

B. C. Chan and C. K. Ong — 343 Tight binding calculation of the elastic properties of compound semiconductors

C. H. Wu and W. J. Javurek — 349 Dispersive orientational dipole relaxation in thermally stimulated depolarization currents

M. A. Abdel-Rahim, A. H. Moharram, M. Dongol and M. M. Hafiz — 355 Experimental studies of the Ge–Sb–Se system

K. F. Ilaiwi and M. Tomak — 361 Impurity photoionization in semiconductors

M. S. Islam — 367 Defect structure and ion transport in LaOBr

Akhilesh K. Arora — 373 Grüneisen parameter of soft phonons and high pressure phase transitions in semiconductors

Technical Note

Takashi Shibata, Yoshihisa Muranushi, Takashi Miura and Tomiya Kishi — 377 Sulfur diffusion of single crystal 2H–SnS_2 on Ag paste

Number 5

E. L. Varetti, M. M. Vergara, G. Rigotti and A. Navaza — 381 The crystal structure and infrared spectra of hydrated nitroprussic acid

C. R. Huang, M. C. Lee, Y. S. Huang, S. S. Lin, T. E. Dann and F. Z. Chien — 387 Complete first-order Raman spectra of $RuSe_2$

Jin-Ho Choy, Gérard Demazeau, Song-Ho Byeon and Jean Michel Dance — 391 A new perovskite-type oxide $(BaLa)(MgMn)O_{6-x}$ ($x \simeq 0.21$) prepared under high oxygen pressure and its physico-chemical characterization

Feng Huixian, Wen Jinke, Wang Huafu, Han Shiying and Xu Yunxia — 397 EPR studies of Fe^{3+} in Mg-doped $LiNbO_3$ crystals

P. J. Sebastian and V. Sivaramakrishnan — 401 Studies on ageing and electrical conduction in CdSe(0.2)Te(0.8) thin films

David A. Dutt, Frank J. Feigl and Gary G. DeLeo — 407 Optical absorption and electron paramagnetic resonance studies of chemically reduced congruent lithium niobate

L. Kovács, Zs. Szaller, I. Cravero, I. Földvári and C. Zaldo — 417 OH-related defects in $LiNbO_3$:Mg, M (M = Nd, Cr, Ti, Mn) crystals

Y. A. Badr and S. B. El-Guiziri — 421 IR and DTA studies of high-temperature phase transition in lithium-ammonium sulphate

M. R. Hantehzadeh, C. S. Han and L. E. Halliburton — 425 Radiation-induced mobility of interstitial alkali ions in iron-doped quartz

S. U. Jen, L. P. Lee and C. H. Lam — 431 Crystallization study of amorphous $Fe_{86}B_{14}$ by electric and magnetic measurements

Lin-gun Liu, M. Liu, H. Verbeek, Ch. Höffner and G. Will — 435 Comparative compressibility of Cu, Ag and Au

R. J. M. Konings, E. H. P. Cordfunke, E. F. Westrum, Jr and R. Shaviv — 439 CsOH: low-temperature heat capacity and high-temperature enthalpy increment

Y. H. Yu, T. Tyliszczak and A. P. Hitchcock — 445 Pb L_3 EXAFS and near-edge studies of lead metal and lead oxides

S. Harris — 453 Initial evolution of the impurity ionization interface in a semiconductor

H. A. A. Sidek, G. A. Saunders and B. James — 457 The pressure and temperature dependences of the elastic behaviour of lithium tetraborate

J. P. Doumerc, Wang Yangshu, P. Dordor, E. Marquestaut, M. Pouchard and P. Hagenmuller — 467 The metal–non-metal transition in the mixed valency solid solution $Cr_{1-x}W_{1+x}O_4$

Technical Note

K. K. Stavrev, K. D. Kvnev and G. St. Nikolov — 475 SCF-INDO force field calculations for tetrahedral MS_4 and MSe_4 clusters

Number 6

Review

S. M. Tomlinson, C. R. A. Catlow and J. H. Harding — 477 Computer modelling of the defect structure of non-stoichiometric binary transition metal oxides

Research Papers

M. Cole, C. R. A. Catlow and J. P. Dragun — 507 EXAFS studies of doped-ZrO_2 systems

G. Gangadhar Reddy and A. Ramakanth — 515 On the semiconductor–metal transition in a model for mixed valence systems

Rex B. McLellan and Margot L. Wasz — 523 The effect of vacancy–interstitial atom interactions on the diffusivity of lattice atoms in binary solid solutions

Hayao Kobayashi, Reizo Kato, Akiko Kobayashi, Yutaka Nishio, Koji Kajita and Wataru Sasaki — 533 Magnetic susceptibilities of $(DMe\text{-}DCNQI)_2Cu$ and $(DBr\text{-}DCNQI)_2Cu$

Jinzuo Sun, Yingjin Li, Hanyun Yu and Zuohong Li — 539 D.C. resistance and superperiodicity in one-dimensional incommensurate systems

R. Tetot, M. Benzakour and G. Boureau — 545 Thermodynamic treatment of Coulomb interactions in non-stoichiometric oxides

Ludmila Roa, C. Rincón, J. González and M. Quintero — 551 Analysis of direct exciton transitions in $CuGa(S_xSe_{1-x})_2$ alloys

Chul Hyun Yo, Kwang Sun Ryu, Woong Bum Pyon and Mu Sil Pyon — 557 A study of the non-stoichiometry of lutetium sesquioxide

Mei-Fan Sung Tang and David A. Stevenson — 563 The relationship between component self-diffusion coefficients and interdiffusion coefficient for pseudobinary systems

Byoung Chan Kwak, Seung Koo Cho, Gweon Heo, Keu Hong Kim and Jae Shi Choi — 571 Electrical conductivity and defect structure of the $Th_xLu_{2-2x}O_{3-x}$ solid solutions

J. P. Kemp and P. A. Cox — 575 Surface composition and oxidation of the layered oxides AMO_2

Technical Notes

J. A. Blair, J. A. Duffy and J. L. Wardell — 581 Acetophosphate glasses: comment

A. Suresh Kumar — 583 Response to the comment of J. A. Blair, J. A. Duffy and J. L. Wardell

585 Corrigendum

587 Announcement

Number 7

P. W. M. Jacobs and G. J. Dienes v Preface

A. *Theory and relaxation of excited states*

John M. Vail 589 Theory of electronic defects: applications to MgO and alkali halides

M. J. L. Sangster with D. Strauch 609 Localized modes associated with defects in ionic crystals

Ralph H. Bartram 641 Radiationless transitions of point imperfections in solids

A. Ranfagni, D. Mugnai and R. Englman 653 Relaxation dynamics in color centers: classical and quantal descriptions

Yuzo Mori and Hiroshi Ohkura 663 Relaxation of optically excited F centers

B. *Production of defect centers by radiation*

R. T. Williams and K. S. Song 679 The self-trapped exciton

Noriaki Itoh and Katsumi Tanimura 717 Formation of interstitial–vacancy pairs by electronic excitation in pure ionic crystals

Masamitsu Hirai 737 Formation of color centers in anion-doped crystals

C. *Hole centers and localized excitons*

Y. Chen and M. M. Abraham 747 Trapped-hole centers in alkaline-earth oxides

W. von der Osten and H. Stolz 765 Localized exciton states in silver halides

J. P. Spoonhower and A. P. Marchetti 793 Trapped holes in silver halides

D. *Investigative techniques*

Mauro Casalboni and Umberto M. Grassano 805 Applications of synchrotron radiation in defect and color center research

Wim Joosen and Dirk Schoemaker 821 Behavior Type method: symmetry and structure of point defects in cubic crystals derived from polarized Raman scattering

Miguel Moreno 835 Microscopic characterization of impurities in insulators through EPR

J.-M. Spaeth and F. Lohse 861 Optically-detected magnetic resonance of intrinsic and impurity centers in ionic crystals

Number 8

Review

J. K. Jain 889 A unified theory of the integer and the fractional quantum Hall effects

Research Papers

G. Petot-Ervas and C. Petot 901 The influence of impurities segregation phenomena on the oxido–reduction kinetics of oxides

E. M. Nour, A. N. Alnaimi and A. B. Alsada 907 Vibrational analysis of the $(VO(O_2)_2NH_3)^-$ ion

Y. Calage, R. Tortevois and F. Varret 911 Phase transition in $FeSnF_6$, $6H_2O$: ^{57}Fe and ^{119}Sn Mössbauer study

D. Praveena and **R. Ethiraj**	915	Strain optical constants of ADP and KDP
Muyu Zhao, Weiya Zhou and **Lizhu Song**	921	Calculation of high-pressure phase diagrams of alloy systems
Ravindra Pandey and **A. Barry Kunz**	929	Characterization of fluorine-doped magnesium oxide: a computer simulation study
J. C. Zhang, B. Moine, C. Pedrini, C. Parent and **G. Flem**	933	Optical spectroscopy of monovalent copper-doped borate glasses
Michio Sorai, Yonezo Maeda and **Hiroki Oshio**	941	Unusual heat capacity of the ferric spin-crossover complex, $[Fe(acpa)_2]PF_6$, showing a gradual but complete spin-state interconversion at the fast spin-flipping rate
I. Földvári, L. A. Kappers, O. R. Gilliam, D. S. Hamilton, Li-Ji Lyu, I. Cravero and **F. Schmidt**	953	The luminescence of molybdenum in $ZnWO_4$ single crystals
J. Ravez, J. P. Bonnet, A. Simon, C. Denage and **J. L. Miane**	957	Correlations between processing parameters and relaxation frequencies in $SrTiO_3$-type grain boundary layer ceramics
Manfred Reehuis and **Wolfgang Jeitschko**	961	Structure and magnetic properties of the phosphides $CaCo_2P_2$ and LnT_2P_2 with $ThCr_2Si_2$ structure and LnTP with PbFCl structure (Ln = lanthanoids, T = Fe, Co, Ni)
Kug Sun Hong, R. F. Speyer and **R. A. Condrate, Sr**	969	Infrared reflectance and transmission spectra of II–IV–V_2 semiconducting compounds: $CdGeAs_2$
David L. Drobeck, Anil V. Virkar and **Richard M. Cohen**	977	The effect of aliovalent dopants on cation diffusion in TiO_2–SnO_2
F. J. Owens and **R. Dalterio**	989	Temperature and pressure dependence of Raman active lattice modes in 1,4 dinitrocubane; evidence of a phase transition
Shen-Yuan Chou and **Jiang-Tsu Yu**	993	Dissociation of the hyperchromate ion into the chromic ion in crystals: an electron spin resonance study
M. A. Taylor, M. Ceolín, P. C. Rivas, J. A. Martínez and **H. Saitovitch**	1001	TDPAC investigation on $NiHfF_6 \cdot 6H_2O$ thermal stability
F. Faure, A. Dautant, A. Bendani and **L. Bonpunt**	1005	Heterodiffusion at infinite dilution of 2-naphthol in naphthalene single crystals—II: activation energies and molecular jumps
		Technical Note
V. L. Solozhenko, V. V. Chernyshev, G. V. Fetisov, V. B. Rybakov and **I. A. Petrusha**	1011	Structure analysis of the cubic boron nitride crystals

Number 9

J. Krustok, J. Mädasson, M. Altosaar and **P. Kukk**	1013	The nature of recombination centres in silver- and chlorine-doped CdS phosphors
M. Zorita and **J. Casas-González**	1019	ENDOR study of the F_{2A}^+ centre in CaF_2:Li
B. Noläng, O. Eriksson and **B. Johansson**	1025	The cohesive energy and band structure of black phosphorus

B. Noläng, O. Eriksson and B. Johansson	1033	The band structure, electron density, and heat of formation of scandium monophosphide
S. H. Lim, G. E. Murch and W. A. Oates	1047	Thermodynamic properties of ordered CsCl-type intermetallic compounds from Monte Carlo simulations
F. De Matteis, M. Rossi, A. Scacco, F. Somma, G. Baldacchini, M. Cremona and U. M. Grassano	1053	Evaluation of the off-axis tilt of the F_A center in KF:Li^+
L. Horváth, V. Nöthig-Laslo, H. Bilinski and H. Foerster	1061	Transformations of structural defects in heated model clay precursors by ESR spectroscopy
S. Z. Weisz, J. Penalbert, A. Many, S. Trokman and Y. Goldstein	1067	Non-parabolicity in the lowest conduction band of CdS
K. Dunphy and W. W. Duley	1077	Multiphoton excitation of Mn^{4+} and Cr^{3+} luminescence in MgO
H. T. Kaibe, M. Sakata and I. A. Nishida	1083	Studies on the holes of p-type $Bi_2Te_{2.85}Se_{0.15}$ single crystal
V. Katsika and J. Grammatikakis	1089	Energy parameters of defect dipole relaxation in Mg^{2+} doped LiF
J. Gonzalez and C. Rincón	1093	Optical absorption and phase transitions in Cu-III–VI_2 compound semiconductors at high pressure
A. Moopenn and L. B. Coleman	1099	Vibrational spectroscopy and the improper phase transition in nickel bromide and copper chloride boracite
E. L. Peltzer y Blancá, O. M. Cappannini, R. A. Casali and C. O. Rodríguez	1111	Direct energy gaps in semiconductors: an *ab initio* calculation of their dependences on hydrostatic pressure
I. Bueno, C. Parada, R. Saez Puche, I. L. Botto and E. J. Baran	1117	Synthesis, crystallographic data, magnetic properties and vibrational study of the new series $KLn(CrO_4)_2$(Ln = Eu, Gd, Tb)
F. Adam, B. Dupré, C. Gleitzer and J. Nowotny	1123	Heterogeneous kinetics in the FeO–O_2 system
Claude Carel and Jean-Raymond Gavarri	1131	Structural evolution study of substituted wüstites Fe_{1-z-y}(Ca, Mg)$_y$O
Xue-an Chen, Zhi-fang Chen, Fu Heng, Youqi Tang, Min-hui Zhu and Yan-yang Shi	1137	Electronic structure and charge fluctuation in $Bi_2Sr_2CuO_6$
	1143	Erratum

Number 10

H. T. Chu, Tian Li and Guo Hua	1145	Fermi energy and electron density in a narrow strip of semimetal bismuth
C. Ruíz-Mejía	1151	F and F_A centers in mixed ionic crystals using Gaussian functions
S. Angelov, E. Zhecheva, R. Stoyanova and M. Atanasov	1157	Bulk defects in Co_3O_4, pure and slightly doped with lithium, revealed by EPR of the tetrahedral Co^{2+} ions
R. Stoyanova, S. Angelov and K. Bozhilov	1163	Localization of CO_2^- anion radicals in strontium carbonate obtained by thermal decomposition of strontium oxalate

M. M. Wakkad	1171	Effect of heat treatment on some of the optical parameters of $Bi_{1.5}Sb_{0.5}Te_3$ thin films
G. S. Khoo and **C. K. Ong**	1177	The migration of self-interstitials in germanium
Rex B. McLellan and **Clarence Ko**	1181	The thermodynamics of Pd–Cr–H solid solutions
S. K. Sipani and **V. P. Gupta**	1185	Thermal and elastic behaviour of mixed alkali halide crystals within the framework of compressible ion theory
G. S. Woods, G. C. Purser, A. S. S. Mtimkulu and **A. T. Collins**	1191	The nitrogen content of type Ia natural diamonds
N. Zotov, K. Petrov and **M. Dimitrova-Pankova**	1199	Infrared spectra of Cu(II)–Co(II) mixed hydroxide nitrates
Irene E. Hooton and **P. W. M. Jacobs**	1207	Ionic transport in crystals of pure and doped sodium chloride
Kenneth B. Schwartz, Mark S. Thompson, Derek B. Leong and **Richard L. McConville**	1217	Cation chemistry and phase relations in the superconducting Bi–Pb–Ca–Sr–Cu–O system
D. Lj. Mirjanić, J. P. Setrajčić, B. S. Tošić and **D. V. Kapor**	1227	Kinematic levels and dielectric permittivity of KDP-type ferroelectrics
Y. Subramanyam, L. R. Moorthy and **S. V. J. Lakshman**	1231	Radiative properties of the $^4F_{3/2} \rightarrow {}^4I_{11/2}$ transition in Nd-doped ternary sulphate glasses, Mg–K–Zn, Ca–K–Zn and Ba–K–Zn
		Technical Note
A. Batana and **J. A. O. Bruno**	1237	Volume dependence of the effective charge of zinc-blende-type crystals
	1239	Erratum

Number 11

		Review
Manfred Bucher	1241	Revaluation of the local field
		General Papers
J.-T. Yu and **S.-Y. Chou**	1255	Electron paramagnetic resonance study of the proton-assisted thermal decompositions of MnO_4^- and CrO_4^{2-} doped into $(NH_4)_2SO_4$ and $LiNH_4SO_4$ crystals
J. Xue and **R. Dieckmann**	1263	The non-stoichiometry and the point defect structure of cuprous oxide ($Cu_{2-\delta}O$)
S. C. Deorani, U. C. Naithani and **B. S. Semwal**	1277	Ultrasonic attenuation in $SrTiO_3$ perovskite above the phase transition
C. Garcin, A. Gerard and **P. Imbert**	1281	Mössbauer absorption and emission study of iron impurity centers in ZnTe
F. Maes, F. Callens, P. Matthys and **E. Boesman**	1289	Electron paramagnetic resonance of selenium defects in NaCl
T. Shibata, Y. Muranushi, T. Miura and **T. Kishi**	1297	Photoconductive properties of single-crystal 2H-SnS_2

C. A. Londos 1301 Charge-state controlled behaviour of the interstitial carbon defect in Czochralski-grown Si

I. Blanchonette, F. Ninio, L. Liu and T. P. Mernagh 1305 High pressure X-ray and Raman study of cesium thiocyanate

D. P. Birnie, III 1313 Migration frequencies for complex diffusion paths

A. G. Fox, M. A. Tabbernor and R. M. Fisher 1323 Low-angle atomic scattering factors and charge density of aluminum

T. M. Haridasan and G. Sathyamurthy 1329 Lattice dynamical appraisal of the anisotropic Debye–Waller factors in graphite

S. D. Darchuk, G. N. Panin, S. V. Plyatsko, F. F. Sizov and E. B. Yakimov 1333 Potential relief in PbTe:In(Cd) heterophase systems

Technical Note

K. C. Mandal and A. Mondal 1339 A new chemical method for preparing semiconductor grade antimony tri-sulphide thin films

Response

Rolf Landauer 1343 Response to the paper of Lodder "Momentum-balance considerations in electromigration revisited"

Number 12

J. Nowotny and M. Rekas 1345 Intercalation equilibria of oxygen in $YBa_2Cu_3O_{7-x}$

J. Horák, Z. Starý, P. Lošťák and J. Pancíř 1353 Anti-site defects in n-Bi_2Se_3 crystals

W. Becker, P. Fröbel, J. Trost and K. Bärner 1361 Detection of proton currents by photochromatic coloration of borate–tungstate glasses: $(Li_2B_4O_7)_{1-x}(WO_3)_x$

D. Dădârlat, M. Chirtoc, C. Neamţu and D. Bicanic 1369 Photopyroelectric detection of magnetic phase transitions. Application to ferromagnetic and itinerant electron antiferromagnetic materials

M. Nabavi, F. Taulelle, C. Sanchez and M. Verdaguer 1375 XANES and ^{51}V NMR study of vanadium–oxygen compounds

N. Onoda-Yamamuro, T. Matsuo and H. Suga 1383 Calorimetric and IR spectroscopic studies of phase transitions in methylammonium trihalogenoplumbates (II)

B. Poumellec, J. M. Gabriagues and H. Fevrier 1397 Anomalous fluorescence-like generation in silica-based optical fibres

M. A. Hefni, N. Nagasundaram, D. Kreszowski and A. H. Francis 1405 ESR studies of inter- and intra-lamellar cation exchange processes in $Cd_2P_2S_6$

A. Shaukat 1413 Composition-dependent band gap variation of mixed chalcopyrites

N. W. Thomas 1419 A new framework for understanding relaxor ferroelectrics

P. E. Tomaszewski 1433 Comments on the "Effect of γ-radiation on the phase transition temperature of $Li_{0.5}(NH_4)_{0.5}SO_4$" by Badr and El-Guiziri

1435 Corrigendum